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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,551	11/30/2001	Christopher D.S. Donham	NVIDP064/P000286	2643

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EXAMINER
TRAN, TAM D

ART UNIT	PAPER NUMBER
2676	6

DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.		Applicant(s)	
Office Action Summary	10/006,551		DONHAM ET AL.	
	Examiner		Art Unit	
	Tam D. Tran		2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*03 September 2003*</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)	4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	5)☐ Notice of Informal Patent Application (PTO-152)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6)☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Migdal (USPN 6426753

B1).

2.   In regard to claim 1, 24-27, Migdal teaches a method and system for retrieving

instructions from memory utilizing a texture module in a graphics pipeline, see col.2 lines 1-5,

comprising: (a) sending an instruction request to memory utilizing a texture module in a graphics

pipeline; see col.3 lines 20-27; and (b) receiving instructions from the memory in response to the

instruction request utilizing the texture module in the graphics pipeline. See col.3 lines 27-30.

3.   In regard to claim 2, Migdal teaches a method and system for retrieving instructions from

memory utilizing a texture module in a graphics pipeline, further comprising sending a texture

request to memory utilizing the texture module in the graphics pipeline. See col.9 lines 25-30.

4.   In regard to claim 3, Migdal teaches a method and system for retrieving instructions from

memory utilizing a texture module in a graphics pipeline, and further comprising receiving

texture information from the memory in response to the texture request utilizing the texture module in the graphics pipeline. See col.9 lines 30-37.

5.   In regard to claim 4, Migdal teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the memory includes a frame buffer. See col.3 lines 40-43.

6.   In regard to claim 5, Migdal teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the memory includes direct random access memory (DRAM). See col.8 lines 1-5.

7.   In regard to claim 6, Migdal teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the instructions are adapted for controlling a texture environment module coupled to the texture module. See col.5 lines 15-20.

8.   In regard to claim 7, Migdal teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the instructions control the manner in which the texture environment module processes the texture information. See col.5 lines 15-20.

9.   In regard to claim 8, Migdal teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, and further comprising receiving initial instructions from a rasterizer.module coupled to the texture module. See col.5 lines 15-30.

10.   In regard to claim 9, Migdal teaches a method and system for retrieving instructions from memory utilizing a texture module in a graphics pipeline, wherein the initial instructions control at least the sending of the instruction request by the texture module. See col.7 lines 55-60.

11.   In regard to claim 10, Migdal teaches a method and system for retrieving instructions

from memory utilizing a texture module in a graphics pipeline, and further comprising

temporarily storing the instructions and the texture information in cache. See col.4 lines 45-50.

12.   In regard to claim 11, Migdal teaches a method and system for retrieving instructions

from memory utilizing a texture module in a graphics pipeline, wherein the cache is resident on

the texture module. See col.3 lines 55-60.

13.   In regard to claim 12, Migdal teaches a method and system for retrieving instructions

from memory utilizing a texture module in a graphics pipeline, wherein each piece of texture

information and each of the instructions are of a similar size in the memory. See col.5 lines 15-

30.

14.   In regard to claim 13, Migdal teaches a method and system for retrieving instructions

from memory utilizing a texture module in a graphics pipeline, and further comprising

controlling the texture module utilizing a shader module coupled thereto. See col.9 lines 25-30.

15.   In regard to claim 14, Migdal teaches a method and system for retrieving instructions

from memory utilizing a texture module in a graphics pipeline, wherein the shader module

controls the sending of the instruction request and the texture request by the texture module. See

col.9 lines 25-30.

16.   In regard to claim 15, Migdal teaches a method and system for retrieving instructions

from memory utilizing a texture module in a graphics pipeline, wherein the shader module

processes a plurality of pixels with the texture information based on the instructions. See col.9

lines 25-30.

17.   In regard to claim 16, Migdal teaches a method and system for retrieving instructions

from memory utilizing a texture module in a graphics pipeline, wherein the shader module is

capable of reusing the texture information in order to request further texture information from the

memory. See col.9 lines 25-35.

18.   In regard to claim 17, Migdal teaches a method and system for retrieving instructions

from memory utilizing a texture module in a graphics pipeline, and further comprising ceasing

the processing upon the receipt of a terminate instruction. See col.11 lines 18-35.

19.   In regard to claim 18, Migdal teaches a method and system for retrieving instructions

from memory utilizing a texture module in a graphics pipeline, wherein a complete instruction

set is received in response to the instruction request. See col.9 lines 30-37.

20.   In regard to claims 19, 20, 21, Migdal teaches a method and system for retrieving

instructions from memory utilizing a texture module in a graphics pipeline, wherein a partial

instruction set is received in response to the instruction request. See col.9 lines 30-37.

21.   In regard to claims 22, 23, Migdal teaches a method and system for retrieving instructions

from memory utilizing a texture module in a graphics pipeline, wherein the texture module is

adapted for operating in a plurality of different modes. See col.10 lines 50-55.

22.   In regard to claims 28, 29, Migdal teaches a method for retrieving instructions from

memory, comprising:(a) receiving a plurality of preliminary instructions from a rasterizer

module utilizing a shader module/ texture module coupled thereto; see col.5 lines 15-30; (b)

sending an instruction request to memory utilizing a texture module coupled to the shader

module/ texture module; see col.7 lines 55-60; (c) receiving additional instructions from the

memory in response to the instruction request utilizing the texture module; see col.9 lines 64-67;

(d) caching the additional instructions on the texture module; see col.9 lines 55-60; (e) sending a

texture request to memory utilizing the texture module in accordance with the additional

instructions; see col.9 lines 25-35; (f) receiving texture information from the memory in response

to the texture request utilizing the texture module; see col.9 lines 30-35; (g) caching the texture

information on the texture module; see col.9 lines 55-60; (h) processing a plurality of pixels with

the texture information utilizing the shader module in accordance with the additional

instructions; see col.8 lines 25-55; (i) repeating (b) - (h) in accordance with the additional

instructions; and (j) outputting the processed pixels upon receipt of additional instructions that

include a terminate instruction. See col.11 lines 18-35.

Response to Arguments

23.   Applicant's arguments filed on 09/03/2003, have been fully considered but they are not

persuasive.

Applicant argues that the prior art does not teach " sending an instruction request to memory

utilizing a texture module in graphic pipeline and receiving instruction from the memory in

response to the instruction request utilizing the texture module in the graphics pipeline"

However, examiner respectfully disagrees with the argument because on col.14 lines 50-65,

Migdal teaches texture request being sent to distributed texture memories of a computer, cache

memory for receiving texture responses from distributed texture memories. In computer system,

there are always instructions to input, output and process data (instruction request). For these

reasons, the rejections are maintained.

24.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Conclusion

25.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Tam D. Tran** whose telephone number is **703-305-4196**. The

examiner can normally be reached on MON-FRI from 8:30 – 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **Matthew Bella** can be reached on **703-308-6829**.

Any response to this action should be mailed to:

          Commissioner of Patents and Trademarks

          Washington, D.C. 20231

or faxed to:

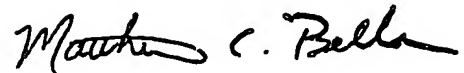   **(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose

telephone number is (703) 306-0377.

Tam Tran

T T

Examiner

Art unit 2676

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600